

AGRICULTURAL NEWS: Farmers were active in their fields last week planting corn and soybeans, setting tobacco and harvesting first cutting hay. Days suitable for fieldwork averaged 5.2 out of a possible 6. Temperatures averaged near normal for the week while rainfall continued below normal. Central and Eastern Kentucky are short to adequate in soil moisture while Northeastern Kentucky is very short of moisture. Topsoil moisture, as of Friday, May 21 was rated 11 percent very short, 37 percent short, 47 percent adequate and 5 percent surplus. Subsoil moisture, was rated 10 percent very short, 30 percent short, 56 percent adequate and 4 percent surplus.

TOBACCO: As of Sunday, May 23, 46 percent of the intended burley acreage had been set. This compares to 25 percent last year and 21 percent for the five year average. About 53 percent of the dark tobacco acreage had been set as of Sunday compared to 23 percent last year and 25 percent for the five year average. Farmers continued to set their tobacco at a rapid pace where good soil moisture conditions was present. Set tobacco with adequate moisture was showing good development while set tobacco in drier areas needs moisture. Some set tobacco will need to be reset due to dry soil conditions and some farmers are waiting for improved soil moisture to set tobacco. Some flea beetles and cutworms in set tobacco have been reported. No disease problems have been reported to date. Condition of all set tobacco as of Friday was 2 percent very poor, 4 percent poor, 29 percent fair, 45 percent good and 20 percent excellent.

CORN: Corn planting was entering its final stages with 96 percent of the acreage planted on Sunday. This compares to 77 percent last year and 77 percent for average. Favorable weather and soil conditions this spring enabled farmers to get their corn planted at a faster pace than last year and

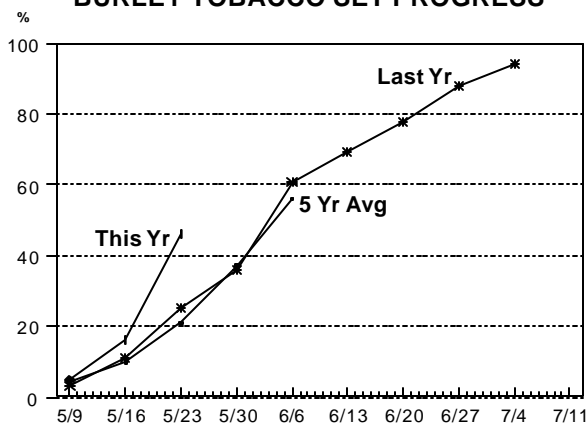
average. About 87 percent of the intended corn acreage has emerged. This compares to 46 percent last year and 66 percent for the five year average. As of Friday, May 21 emerged corn was rated 1 percent poor, 17 percent fair, 56 percent good and 26 percent excellent. Corn is growing well but army worms were reported by one reporter. Average height of emerged corn was 9 inches while height in the most advanced fields averaged 18 inches.

SOYBEANS: As corn planting winds down farmers are turning their attention to planting single crop soybeans. As of Sunday, May 23, 44 percent of the acreage had been planted. This compares to 17 percent last year and 18 percent for the five year average. Of the intended acreage 26 percent has emerged. This is way ahead of last year with 1 percent and the average of 2 percent.

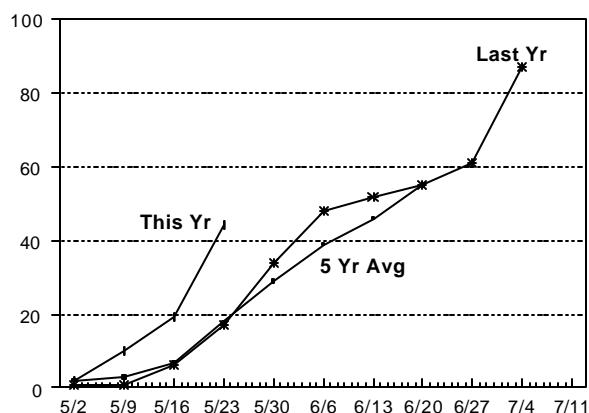
SMALL GRAINS: The winter wheat crop continues to be promising with little disease reported. Wheat harvest in Kentucky should start on June 20. Some farmers are cutting their wheat for hay instead of harvesting it for grain. Condition of winter wheat was rated 9 percent fair, 58 percent good and 33 percent excellent. Barley harvest is expected to start on June 6.

OTHER CROPS: Farmers are harvesting first cutting alfalfa as weather conditions permit. Yields are reported lighter while quality is good. Condition of the hay crop was rated 8 percent poor, 21 percent fair, 48 percent good and 23 percent excellent. Pastures are providing good grazing for livestock but are slow in regrowth due to drier soil conditions. Pastures were rated 2 percent very poor, 7 percent poor, 22 percent fair, 50 percent good and 19 percent excellent. Sorghum planting was over 50 percent complete. Farmers in drier areas of the State reporting decreased water supplies available for their livestock.

BURLEY TOBACCO SET PROGRESS



SOYBEAN PLANTING PROGRESS



KENTUCKY CROP PROGRESS
WEEK ENDING MAY 23, 1999
WITH COMPARISONS

Crop Stage	This Week	Previous Year	5-Yr. Avg.	Previous Week KY	U.S.
Percentage					
Corn					
Planted	96	77	77	89	77
Emerged	87	46	66	71	30
Soybeans					
Planted	44	17	18	19	28
Emerged	26	1	2	3	6
Burley Tobacco Set	46	25	21	16	NA
Dark Tobacco Set	53	23	25	13	NA

(NA) Data Not Available

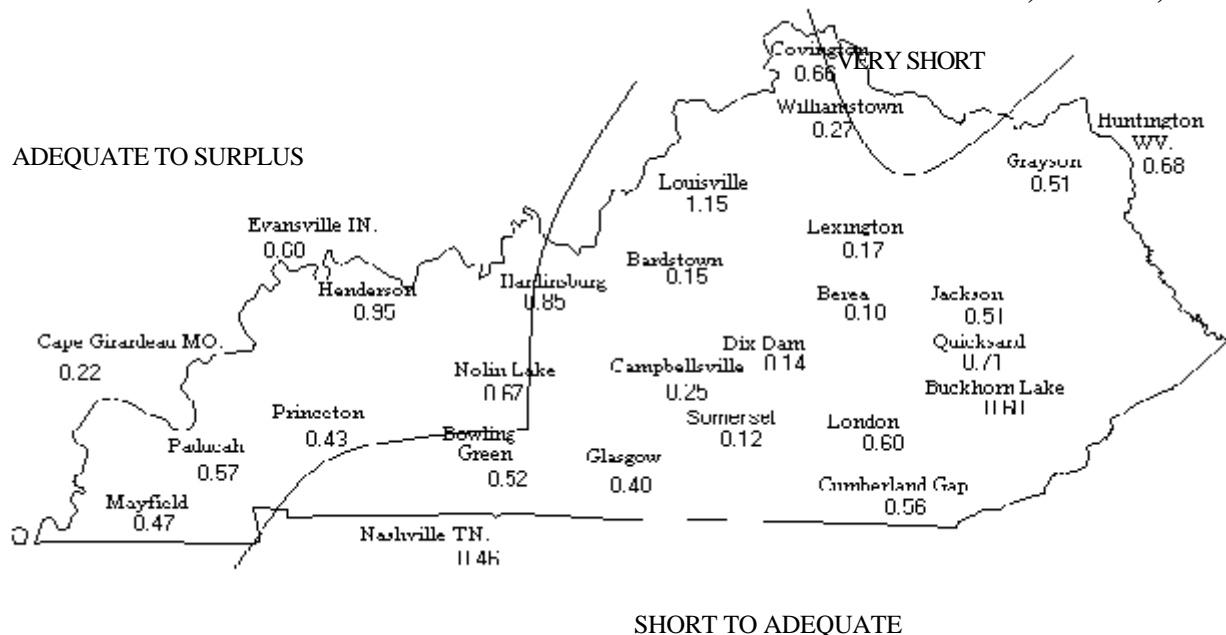
SOIL MOISTURE
WEEK ENDING MAY 21, 1999
WITH COMPARISONS

	This Week	Previous Week
Percentage		
TOPSOIL		
Very Short	11	9
Short	37	26
Adequate	47	58
Surplus	5	7
SUBSOIL		
Very Short	10	10
Short	30	24
Adequate	56	58
Surplus	4	8

KENTUCKY CROP CONDITIONS (Percent)

CROP	WEEK ENDING MAY 21, 1999					WEEK ENDING MAY 14, 1999				
	VERY POOR	POOR	FAIR	GOOD	EXCEL- LENT	VERY POOR	POOR	FAIR	GOOD	EXCEL- LENT
Corn Emerged	0	1	17	56	26	0	3	20	59	18
Wheat	0	0	9	58	33	0	3	18	58	21
Pasture	2	7	22	50	19	1	8	29	50	12
Hay Crops	0	8	21	48	23	1	9	30	46	14
Tobacco Set	2	4	29	45	20	0	5	28	55	12

PRECIPITATION MAP FOR WEEK ENDING SUNDAY, MAY 23, 7:00 P.M.
TOPSOIL MOISTURE DELINEATION FOR WEEK ENDING FRIDAY, MAY 21, 1999



KENTUCKY WEATHER SUMMARY, MAY 17 - 23, 1999:

NEAR NORMAL Temperatures and BELOW NORMAL Rainfall:

Temperatures for this past week averaged 67 degrees across the state which was NEAR NORMAL and 1 degree below the previous. High temperatures averaged from 80 in the West to 78 in the East. Departure from normal high temperatures ranged from 2 degrees BELOW NORMAL in the West to 1 degree ABOVE NORMAL in the East. Low temperatures averaged from 56 degrees in the West to 55 degrees in the East. Departure from normal low temperature ranged from 2 degrees BELOW NORMAL in the West to 1 degree BELOW NORMAL in the East. Extreme high temperatures were in the mid to upper 80's and extreme low's were in the mid 40's. Precipitation (liq. equ.) for the week totaled 0.50 inches statewide which was 0.56 inches BELOWNORMAL. Precipitation totals by climate division, West 0.55 inches, Central 0.62 inches, Bluegrass 0.28 inches and East 0.54 inches, which was 0.55, 0.48, 0.75 and 0.47 inches respectively BELOW NORMAL. By station, precipitation totals ranged from a low of 0.10 inches at Berea to a high of 1.15 inches at Louisville. As of May 15, the Palmer Drought Severity Index (PDSI) indicated moderate drought conditions existed in the Bluegrass area (Climate Zone 03). Rainfall late Sunday evening was not considered in the above report.

Tom Priddy

KENTUCKY TEMPERATURES AND RAINFALL

FOR WEEK ENDING SUNDAY, MAY 23, 7:00 P.M.

Weather Station	Rainfall			Deviation From		Air Temperature				Growing Degree Days		
	Last Week	Since April 1	Last Four Wks	Norm Since Apr. 1	Norm Last 4 Wks	High	Low	Wkly. Avg.	Dev. From Norm	Dev. Last Since Week Apr. 1	Since Apr. 1	
	(Inches)			(Degrees Fahrenheit)								
Bardstown	0.15	6.03	4.77	-1.17	+0.81	84	49	67.3	-0	121	701	+56
Berea	0.10	5.13	4.03	-2.70	-0.25	83	47	67.4	+1	122	746	+78
Bowling Green	0.52	4.62	3.24	-3.37	-1.15	86	49	69.0	+1	132	768	+100
Bristol	0.58	4.60	3.01	-1.59	-0.43	83	44	65.1	-1	108	650	+58
Buckhorn Lake	0.60	5.57	3.77	-1.23	+0.10	83	45	65.6	-1	113	714	+122
Cape Girardeau	0.22	7.19	2.76	-1.09	-1.83	87	49	69.0	-1	133	722	+31
Campbellsville	0.25	6.68	4.99	-1.91	+0.35	84	47	67.4	-0	123	766	+98
Covington	0.66	4.56	2.12	-2.37	-1.68	84	44	64.8	-2	104	583	+21
Cumberland Gap	0.56	5.43	3.58	-2.22	-0.67	83	47	66.6	+0	116	687	+95
Dix Dam	0.14	4.81	3.61	-2.93	-0.61	84	49	67.4	+1	120	703	+58
Evansville	0.68	7.65	5.11	+0.11	+0.92	83	50	67.2	-2	119	664	+26
Glasgow	0.40	5.66	4.08	-2.64	-0.43	86	48	68.5	+1	130	838	+230
Grayson	0.51	5.54	3.61	-1.25	-0.16	84	49	67.1	+1	119	713	+174
Hardinsburg	0.85	8.03	5.47	+0.11	+1.14	83	43	65.9	-2	116	700	+32
Henderson	0.95	7.84	5.19	+0.20	+1.10	85	50	68.9	-1	129	732	+64
Huntington	0.68	3.76	2.13	-3.00	-1.63	82	46	67.1	+0	120	685	+93
Jackson	0.51	5.29	3.18	-2.13	-0.83	82	51	66.8	+0	116	714	+122
Lexington	0.17	3.18	1.76	-4.02	-2.20	84	47	67.1	+0	121	658	+96
London	0.60	5.99	3.39	-1.09	-0.42	82	47	66.4	-0	117	699	+107
Louisville	1.15	7.39	5.97	-0.27	+1.84	85	51	68.1	+0	126	693	+55
Mayfield	0.47	7.41	3.47	-1.36	-1.09	83	49	67.9	-2	124	751	+30
Nashville	0.46	6.90	5.14	-1.09	+0.79	85	52	70.0	+2	137	832	+111
Nolin Lake	0.67	5.75	3.94	-2.85	-0.88	84	48	67.8	+0	124	744	+99
Paducah	0.57	9.56	4.07	+0.88	-0.43	84	48	67.9	-2	125	747	+56
Princeton	0.43	9.01	4.90	+0.53	+0.42	86	39	67.6	-2	129	828	+130
Quicksand	0.71	5.10	3.73	-2.32	-0.28	83	45	65.4	-1	111	722	+130
Somerset	0.12	9.64	6.86	+1.53	+2.37	82	45	66.4	-0	118	715	+70
Spindletop	0.32	3.21	2.26	-3.99	-1.70	84	49	66.3	-0	114	623	+61
Williamstown	0.27	2.90	1.21	-4.52	-2.75	84	48	67.7	+1	124	675	+113

The above information is provided by Tom Priddy, Kentucky Extension Agricultural Meteorologist, University of Kentucky Agr'l Weather Center (606)257-3000 ext 245. E-mail: tpriddy@ca.uky.edu Additional Ky weather data available on Internet at: <http://www.wagwx.ca.uky.edu/>

A GUIDE TO GROWING DEGREE DAYS

For the 1999 growing season, the Kentucky Agricultural Statistics Service in cooperation with the National Weather Service will provide weekly accumulated growing degree days (GDD) data.

These GDD are calculated according to the definition:

$$\text{GDD} = \frac{\text{Daily Max (}\neq 86\text{E F)} + \text{Daily Min (}\$ 50\text{EF)}}{2} - 50\text{EF}$$

Maximum temperatures above 86EF are entered as 86E and minima below 50E are entered as 50E. This modification is designed to take into account the differing response of plants to quite high or quite low temperatures. There are several methods of calculating GDD, but the above formula is most widely accepted. This adjusted 50EF method of calculating GDD has been adopted by the Hybrid Seed Corn Industry as a basis for a uniform maturity rating system.

At 50EF corn grows hardly at all. As the temperature rises up to the range of 80E to 86EF, corn grows faster if moisture is adequate. When the temperature rises above 86EF the roots have increasing difficulty taking in water fast enough to keep plant cells turgid (full of water) and working at top speed. When soil moisture is short, the optimum temperature is less than 80EF. With perfect moisture supply the optimum temperature is likely 90E to 95EF.

The concept of growing degree days is still under study and refinement. In its short existence growing degree days has proven to be a much better gauge for rating corn maturity than the old "days of maturity" rating. The use and importance of GDD will improve as information is collected over the years.

Corn Percent Planted Week Ending May 16, 1999

State	May 16 1999	Prev Week	Prev Year	5-Yr Avg
CO	53	26	90	76
GA	100	100	97	98
IL	77	58	60	63
IN	90	57	46	50
IA	83	66	89	80
KS	74	47	95	82
KY	89	78	55	62
MI	72	41	77	49
MN	87	79	97	76
MO	51	39	72	68
NE	71	27	93	77
NC	90	85	84	94
OH	93	71	35	53
PA	65	42	33	42
SD	31	20	76	45
TX	92	81	94	94
WI	73	53	80	59
ALL	77	55	76	68
These 17 States planted 90% of last year's corn acreage.				

Soybean Percent Planted Week Ending May 16, 1999

State	May 16 1999	Prev Week	Prev Year	5-Yr Avg.
AL	24	10	24	24
AR	21	10	32	21
GA	16	8	11	17
IL	27	6	11	20
IN	55	21	18	23
IA	21	5	55	36
KS	13	4	36	19
KY	19	10	6	7
LA	44	30	74	44
MI	34	8	36	15
MN	26	17	75	38
MS	62	43	64	54
MO	12	3	19	14
NE	12	1	46	25
NC	15	7	15	18
OH	74	41	13	26
SC	22	13	24	16
SD	6	2	30	14
TN	11	6	5	7
ALL	28	12	34	25
These 19 States planted 93% of last year's soybean acreage.				